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HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
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HOFFLER, RAHEEM

ART UNIT	PAPER NUMBER
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2165

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/825,207

Applicant(s)

MESSICK, RANDALL E.

Examiner

Raheem Hoffer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/16/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **Detailed Action**

### ***Response to Amendment***

1. The Office Action has been issued in response to amendment filed 23 January 2007. Claims 1-32 are pending. Claim rejection made to Claim 1-2, 4-8, and 21-27 under U.S.C. 101 have been withdrawn as a result of applicant's amendment. Claim rejection made to Claim 21 under U.S.C. 112 has also been withdrawn due to applicant's amendment. Applicant's arguments have been carefully and respectfully considered in light of the instant amendment, and are not persuasive. Accordingly, this action has been made FINAL.

### **Claim Rejections – 35 USC 102**

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 13 and 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Kojima et al (USPG-Pub No. 20050076281A1).

As for Claim 13, Kojima et al teaches a message-based system for managing a storage area network (SAN) (see paragraph [0103]), comprising: a management server

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(e.g., network terminal; see paragraph [0009][0010] and [0011]) that monitors states of devices coupled to the SAN and sends alert messages based on the states (see paragraph [0052][0096][0097] and [0098]); and a message processor that receives the alert messages and sends notification messages (see Fig. 6, 11), the message processor comprising: a receiver that receives the alert messages (see Fig. 3 (225); e.g., error detection unit; ([0009][0010][0011], and [0041])), a parser that analyzes the received alert messages (see Fig. 3 (226); e.g., notification judgment unit; see paragraph [0009][0010][0011], and [0043])), a formatter/addresser that formats and addresses the notification messages, and a transmitter that sends the notification messages to messaging devices (see Fig. 3 (224); e.g., notification unit; (see paragraph [0009][0010][0011], and [0042])).

Claim 28 differs from Claim 13 in that claim 28 is a system whereas claim 13 is a system claim. Thus, claim 28 is analyzed as previously discussed with respect to claim 13 above.

### **Claim Rejections – 35 USC 103**

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-12, 14-27, and 29-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kojima et al (USPG-Pub No. 20050076281A1) in view of Primm et al (US Patent No. 7095321B2).

As for Claim 1, Kojima et al teaches of a message-based method for managing a storage area network (SAN) (see paragraph [0103]), comprising identifying a notification message (see Fig. 11(a, b); see paragraph [0006][0038][0096]), wherein the notification message provides information related to the state of the device (e.g., error detection unit, judgment unit; (see paragraph [0009][0010][0042] and [0043])). Kojima et al failed to explicitly recite the limitations of receiving an alert related to a state of a device coupled to the SAN, parsing the alert to identify the state of the device, comprising: determining a problem category, and determining action options, consulting an action rules database, identifying action required in response to the identified state of the device. Primm et al teaches receiving an alert related to a state of a device (e.g., error condition objects; (see col. 4, lines 37-47); parsing the alert to identify the state of the device (e.g., alert handling system; (see col. 3, lines 26-29; col. 6, line 49- col. 7, line 3; col. 8, lines 16-23; col. 9, lines 24-38)), comprising: determining a problem category and determining action options (e.g., alert actions; (see col. 8, lines 28-33; col. 12, lines 20-24, 29-32)), comprising consulting an action rules database (e.g., alert profiles; (see col. 6, line 57- col. 7, line 3; col. 12, lines 34-41, 51-54)); identifying action required in response to the identified state of the device (e.g., action handlers; (see col. 9, line 58- col. 10, line 65)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined an alert monitoring and notification system and method as taught by Primm et al with the network terminal that notifies the administrator of error as taught by Kojima et al because an improved monitoring, alert processing and notification system and method would broaden functionality, address severity of an error, and enhance response times for system maintenance (Primm et al see col. 1, lines 24-58)

As for Claim 2, Kojima et al teaches identifying an operator of the SAN to receive the notification message (e.g., administrator, (see paragraph [0096][0098][0099] and [0105])).

As for Claim 3, Kojima et al teaches sending the notification message to the operator (Fig. 17 (s64); see paragraph [0093][0095][0097] and 0099)).

As for Claim 4, Kojima et al teaches waiting on a response message from the operator (see paragraph [0097][0098][0099] and 0100)). Kijima et al fails to clearly recite directing performance of one or more action steps. Primm et al teaches of directing performance of one or more action steps (e.g., action handlers) and directing execution of the action steps (Fig. 3 (110); e.g., alert handling system; (see col. 3, lines 26-29; col. 6, line 49- col. 7, line 3; col. 8, lines 16-23; col. 9, lines 24-38; col. 13, lines 40-43; col. 9, 58- col. 10, line 65)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined directing performance of one or more action steps as taught by Primm et al with notification messages as taught by Kojima et al for the motivation expressed in independent Claim 1 above.

As for Claim 5, Kojima et al teaches the information in the notification message (see Fig. 6; (see paragraph [0006][0038][0096] and [0098])). Kijima et al fails to clearly recite including one or more suggested action steps for execution. Primm et al clearly teaches of including one or more suggested action steps for execution (e.g., alert handling system; (see col. 3, lines 26-29; col. 6, line 49- col. 7, line 3)).

Therefore, it would have been obvious to one of ordinary skill in the art to have combined suggested action steps for execution as taught by Primm et al with notification messages taught by Kojima et al for the motivation expressed in independent Claim 1 above.

As for Claim 6, Kojima et al teaches of the information within notification messages, but fails to explicitly recite directing performance of one or more automatic action steps. Primm et al teaches directing performance of one or more automatic action steps (see Fig. 3 (110); e.g., alert handling system; (see col. 3, lines 26-29; col. 6, line 49- col. 7, line 3; col. 8, lines 16-23; col. 9, lines 24-38; col. 13, lines 40-43)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined directing performance of one or more

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automatic action steps as taught by Primm et al with notification messages taught by Kojima et al for the motivation expressed in independent Claim 1 above.

As for Claim 7, Kojima et al teaches of notification messages, but fails to explicitly recite the information includes a report of automatic action steps completed. Primm et al clearly teaches the information includes a report of automatic action steps completed (e.g., displaying error conditions; (see col. 11, lines 41-50)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined a report of automatic action steps completed as taught by Primm with notification messages as taught by Kojima et al for the motivation expressed in independent Claim 1 above.

As for Claim 8, Kojima et al teaches of notification messages, but fails to explicitly recite notification messages are one of an e-mail message, a voice message and a voice-to-text message. Primm et al teaches that notification messages are one of an e-mail message, a voice message and a voice-to-text message (e.g., action handlers; (see col. 9, line 58- col. 10, line 65)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined an e-mail message, a voice message and a voice-to-text message with the notification messages as taught by Kojima et al for the motivation expressed in independent Claim 1 above.



As for Claim 9, Kojima et al teaches a method for managing a storage area network (SAN) [0103], wherein a message processor receives alerts from a management server and sends notification messages (see Fig. 11(a, b), Fig. 16 (s55); see paragraph [0006][0038] and [0096]) to SAN operators ((e.g., administrator, (see paragraph [0096][0098][0099] and [0105]))). Kojima et al also teaches of identifying an operator to receive a notification message (e.g., administrator, (see paragraph [0096][0098][0099], [0105])). Primm et al clearly teaches of monitoring states of devices (see Fig. 3 (106); e.g., monitoring system; (see col. 1, line 64- col. 2, line 4; col. 14, lines 40-45)); receiving an alert when a state of a device indicates a problem (e.g., alert actions; (see col. 8, lines 28-33; col. 12, lines 20-24, 29-32)). In addition, Primm et al teaches determining if the alert is understood, wherein if the alert is not understood, the message processor sends a return message to the management server (e.g., alert handling system; (see col. 3, lines 26-29; col. 6, line 49- col. 7, line 3; col. 8, lines 16-23; col. 13, lines 40-43)); identifying a device subject to the alert, identifying a problem as indicated by the alert, identifying action steps for responding to the problem (e.g., alert actions; (col. 8, lines 28-33; col. 12, lines 20-24, 29-32)), and formatting and sending the notification message (e.g., action handlers; (see col. 9, line 58- col. 10, line 65; col. 13, lines 40-43)). The alert handling system determines if that alert has been understood and processed through recognition of the data it has received from the error object. A proper response would be chosen afterwards.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined an alert monitoring and notification

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system and method as taught by Primm et al with the network terminal that notifies the administrator of error as taught by Kojima et al because an improved monitoring, alert processing and notification system and method would broaden functionality, address severity of an error, and enhance response times for system maintenance (Primm et al (see col. 1, lines 24-58)

As for Claim 10, Kojima et al teaches of notification messages, but fails to explicitly recite identifying a problem category. Primm et al teaches identifying the problem comprises identifying a problem category (e.g., alert actions; (col. 8, 28-33)) and consulting an action rules database (e.g., alert profiles; (see col. 6, line 57- col. 7, line 3; col. 12, lines 34-41, 51-54)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined identifying a problem category as taught by Primm et al with notification messages as taught by Kojima et al for the motivation expressed in independent Claim 9 above.

As for Claim 11, Kojima et al teaches of notification messages, but fails to explicitly recite determining if action is required, identifying the action, and determining if the action is automatic. Primm et al teaches identifying action steps comprises determining if action is required, identifying the action, and determining if the action is automatic (e.g., alert profiles; (see col. 6, line 57- col. 7, line 3; col. 12, lines 34-41, 51-54)).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined determining if action is required, identifying the action, and determining if the action is automatic as taught by Primm et al with notification messages as taught by Kojima et al for the motivation expressed in independent Claim 9 above.

As for Claim 12, Kojima et al teaches of notification messages, but fails to explicitly recite if the action is automatic, initiating the action. Primm et al teaches if the action is automatic, initiating the action (e.g., alert handling system; ((see col. 6, line 49- col. 7, line 3; col. 9, lines 24-38))).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined initiating an action as taught by Primm et al with notification messages as taught by Kojima et al for the motivation expressed in independent Claim 9 above.

As for Claim 14, Kojima et al teaches of notification messages, but fails to explicitly recite an action rules database that specifies possible corrective actions. Primm et al teaches an action rules database that specifies possible corrective actions (e.g., alert profile; (see col. 6, line 57- col. 7, line 3), wherein the parser consults the database and uses a state of a device ((see col. 4, lines 37-47; col. 13, lines 25-39; col. 14, lines 6-13)) to determine action options ((see col. 8, lines 28-33; col. 12, lines 20-24).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined an action rules database taught by Primm et al with notification messages as taught by Kojima for the motivation expressed in independent Claim 9 above.

As for Claim 15, Kojima et al clearly teaches of the message processor (e.g., network terminal; see paragraph [0009], [0010], and [0011]). Kijima et al fails to clearly recite possible corrective actions include actions to be initiated automatically. Primm et al teaches of the possible corrective actions include actions to be initiated automatically (e.g., alert actions; (see col. 8, lines 28-33; col. 12, lines 20-24, 29-32; col. 15, lines 3-13)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined corrective actions as taught by Primm et al with notification messages as taught by Kojima et al for the motivation expressed in independent Claim 9 above.

As for Claim 16, Kojima et al teaches of requiring approval of a system administrator receiving a notification message (see Fig. 21; see paragraph [0048][0050][0053] and [0055]). Kijima et al fails to clearly recite possible corrective actions include action options, and wherein the notification message includes the action options. Primm et al teaches the possible corrective actions include action options, and

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wherein the notification message includes the action options ((see col. 12, lines 20-24, 29-32; col. 9- col. 10, line 65)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined corrective actions as taught by Primm et al with notification messages as taught by Kojima et al for the motivation expressed in independent Claim 9 above.

As for Claim 17, Kojima et al teaches of notification messages, but fails to explicitly recite the formatter/addresser formats the alert messages for receipt by one or more of a Web browser, a mobile phone, and a telephone. Primm et al teaches the formatter/addresser formats the alert messages for receipt by one or more of a Web browser, a mobile phone, and a telephone (e.g., action handlers; (see col. 9, line 58- col. 10, line 65; col. 13, lines 40-43)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the formatter/addresser as taught by Primm et al with the notification messages as taught by Kojima et al for the motivation expressed in independent Claim 9 above.

As for Claim 18, Kojima et al teaches of notification messages, but fails to explicitly recite the management server initiates automatic corrective action based on a monitored state of a device. Primm et al teaches the management server initiates automatic corrective action based on a monitored state of a device (e.g., alert handling

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system; ((col. 6, line 49- col. 7, line 3; col. 9, lines 24-38)), and wherein a notification message indicates the action taken by the management server (e.g., error notification; (see col. 11, lines 41-50; col. 13, lines 25-39; col. 14, lines 6-13)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the management server as taught by Primm et al with notification messages as taught by Kojima et al for the motivation expressed in independent Claim 9 above.

As for Claim 19, Kojima et al teaches of notification messages, but fails to explicitly recite alert messages are e-mail messages. Primm et al clearly teaches the alert messages are e-mail messages ((see col. 9, line 65- col. 10, 8; col. 10, lines 38-42)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined alert messages are email messages as taught by Primm et al with notification messages as taught by Kojima et al for the motivation expressed in independent Claim 9 above.

As for Claim 20, Kojima et al teaches of notification messages, but fails to explicitly recite a lightweight directory access protocol (LDAP) database. Primm et al teaches a lightweight directory access protocol (LDAP) database that specifies recipients of the alert messages and transmission modes and addresses (see col. 4, lines 11-15).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined a lightweight directory access protocol (LDAP) database as taught by Primm et al with notification messages as taught by Kojima et al for the motivation expressed in independent Claim 9 above.

Claim 21 differs from Claim 1 in that claim 21 is a computer program product whereas claim 1 is a method claim. Thus, claim 21 is analyzed as previously discussed with respect to claim 1 above.

Claims 22-27 differ from Claims 2-7 in that claims 22-27 are computer program products whereas claims 2-7 are method claims. Thus, claims 22-27 are analyzed as previously discussed with respect to claims 2-7 above.

Claims 29-32 differ from Claims 14-17 in that claims 29-32 are system whereas claims 14-17 are system claims. Thus, claims 29-32 are analyzed as previously discussed with respect to claims 14-17 above.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-20 have been fully considered but are not persuasive in view of the original grounds of rejection.

With respect to applicant's argument that:

"...claim 13 recites "an action rules database that specifies possible corrective actions for correcting a problem associated with the alert, wherein the parser consults the database to select one or more of the corrective actions." Kojima does not teach these elements."

Examiner is not persuaded. Examiner acknowledges that applicant's amendment to Claim 13 presents additional limitations that were not originally considered during the first Office Action submitted by examiner. Examiner maintains the rejection of Claim 13 due to the claim language being taught by Primm et al (US Patent No. 7095321B2) referenced within the Office Action under U.S.C. 103(a) rejections. Within Primm et al, "an action rules database that specifies possible corrective actions associated with an alert" is taught. (e.g., alert profiles; (see col. 6, line 57- col. 7, line 3; col. 12, lines 34-41, 51-54))(e.g., action handlers; (see col. 9, line 58- col. 10, line 65)).

With respect to applicant's argument that:

"...claim 28 recites "means for identifying actions to correct problems associated with the alert messages; means for automatically performing the actions to correct the problems when an operator is not required to make a decision for correcting the problems; and means for sending the actions to correct the problems to the operator when the operator is required to make a decision for correcting the problems. Kojima does not teach these elements."

Examiner is not persuaded. Examiner acknowledges that applicant's amendment to Claim 28 presents additional limitations that were not originally considered during the first Office Action submitted by examiner, and is similarly analyzed and rejected as previously discussed with respect to Claim 13 above.

With respect to applicant's argument that:



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"Primm never teaches that the system identifies an action required to correct the problem. Further, Primm never teaches that the system automatically performs the action to correct the problem. ...the alert actions in Primm merely notify the user, not provide the user with an action to correct the alert."

Examiner is not persuaded and maintains that the relied upon teachings of Primm et al discloses both alert profiles and alert handlers, which are equivalent to applicant's teachings of identifying an action to correct a problem and automatically performing that action. "Each alert profile defines a set of one or more response sequences. Each sequence defines a set of alert actions to be taken, the time after the beginning of the alert to execute the actions for the first time..." (see col. 6, line 57-67; col. 7, lines 1-3; col. 12, lines 34-41, 51-54)

***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raheem Hoffler whose telephone number is (571) 270-1036. The examiner can normally be reached on 7:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffery Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RH



Raheem Hoffler



ALFORD KINDRED  
PRIMARY EXAMINER